09/762541

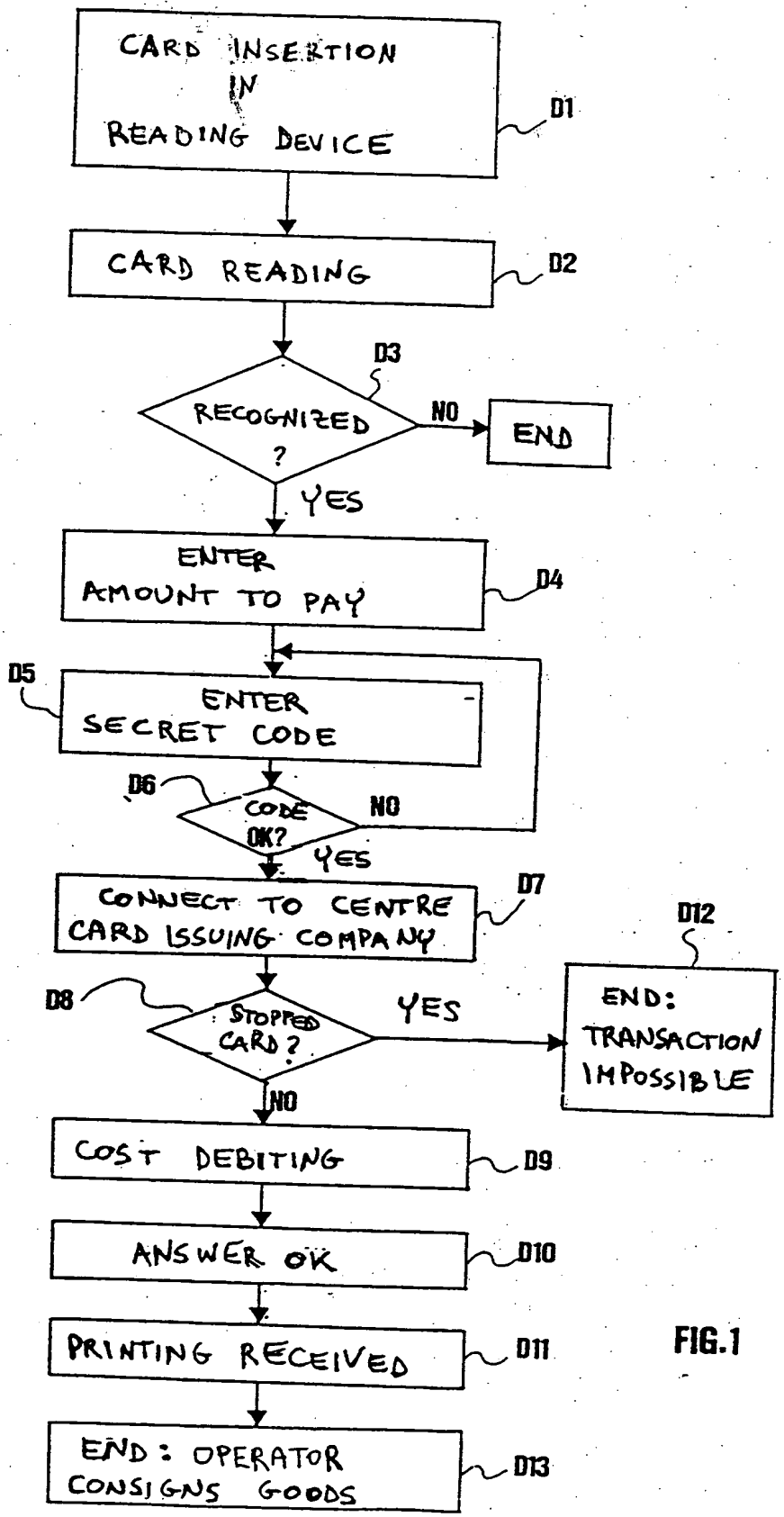

FIG.1

09762541 - 041201

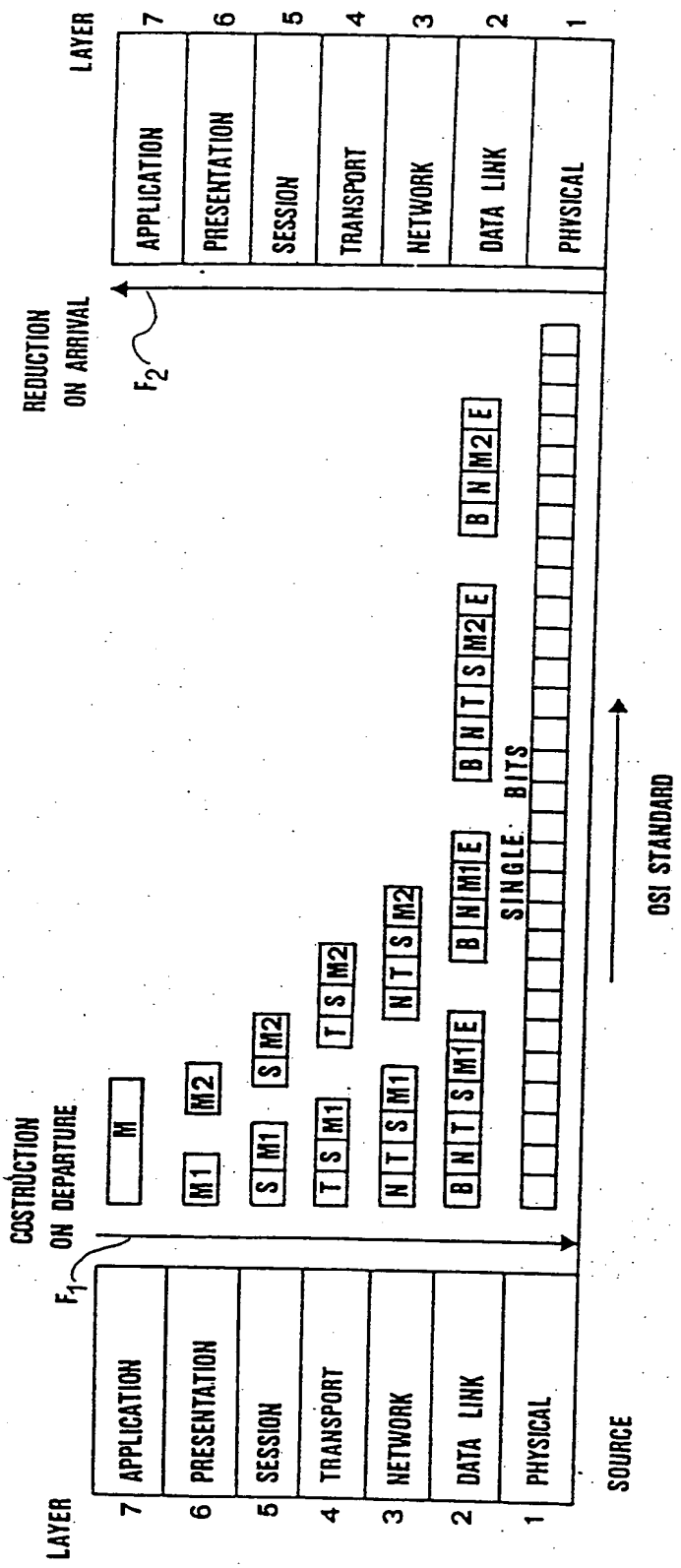
LAYER
7 APPLICATION
6 PRESENTATION
5 SESSION
4 TRANSPORT
3 NETWORK
2 DATA LINK
1 PHYSICAL
SOURCE
COSTRUCTION ON DEPARTURE
F1
M
M1 M2
S M1 S M2
T S M1 T S M2
N T S M1 N T S M2
B N M1 E B N T S M1 E
B N T S M2 E B N M2 E
SINGLE BITS
OSI STANDARD
REDUCTION ON ARRIVAL
F2
LAYER
7 APPLICATION
6 PRESENTATION
5 SESSION
4 TRANSPORT
3 NETWORK
2 DATA LINK
1 PHYSICAL

FIG 2

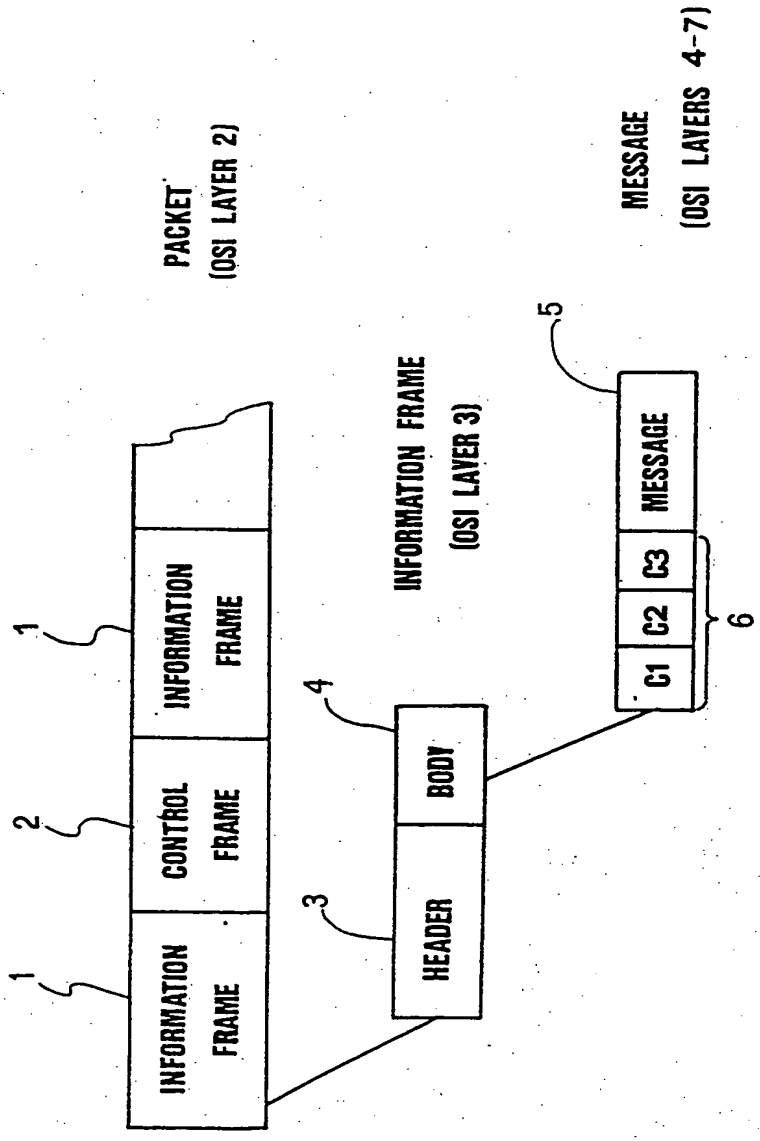
PACKET
(OSI LAYER 2)
INFORMATION FRAME
(OSI LAYER 3)
MESSAGE
(OSI LAYERS 4-7)
INFORMATION FRAME
CONTROL FRAME
INFORMATION FRAME
HEADER
BODY
C1
C2
C3
MESSAGE
1
2
1
3
4
5
6

FIG 3

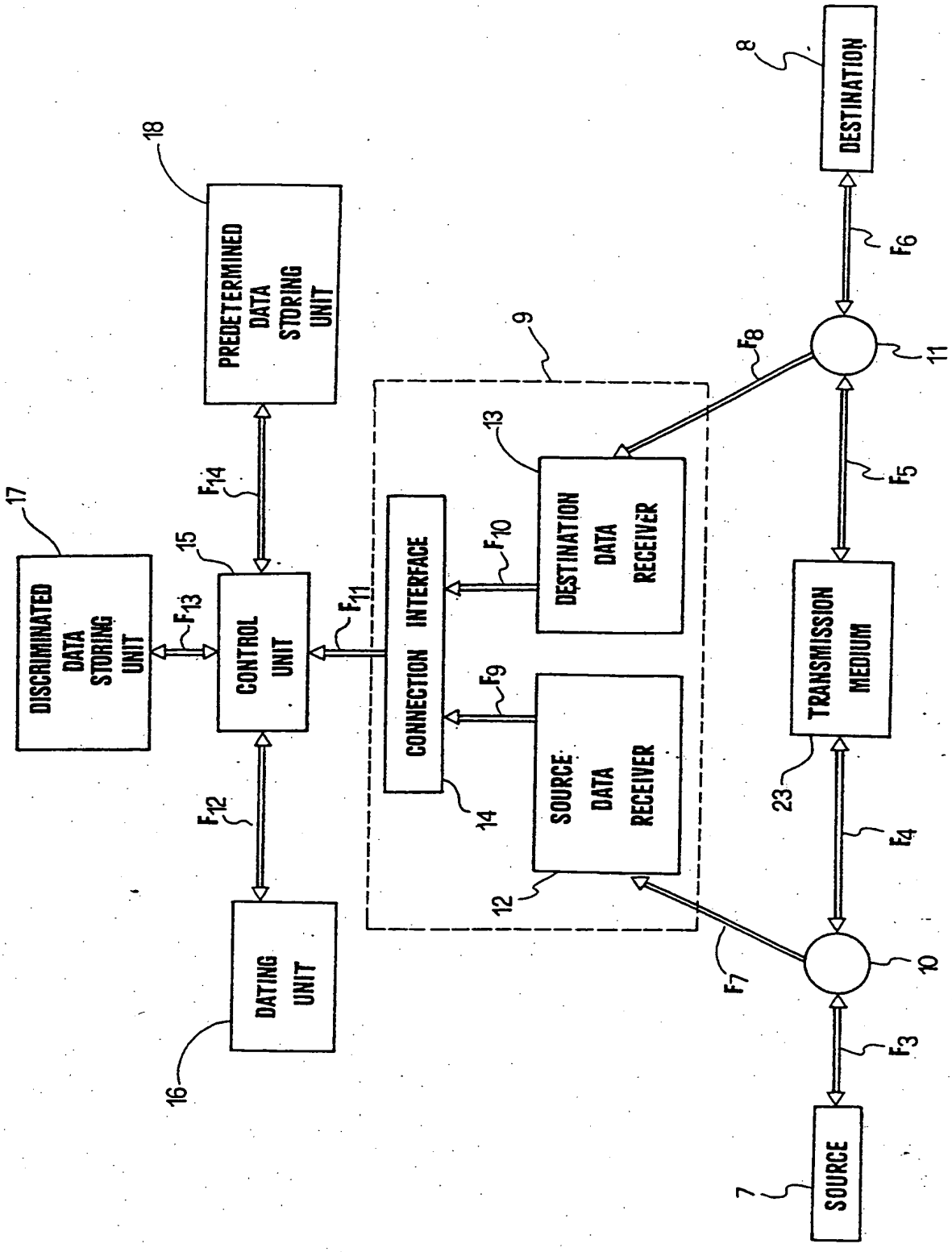
DESTINATION
8
PREDETERMINED DATA STORING UNIT
18
DISCRIMINATED DATA STORING UNIT
17
CONTROL UNIT
15
CONNECTION INTERFACE
14
DESTINATION DATA RECEIVER
13
SOURCE DATA RECEIVER
12
DATING UNIT
16
TRANSMISSION MEDIUM
23
SOURCE
7
9
11
10
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
F13
F14

FIG 4

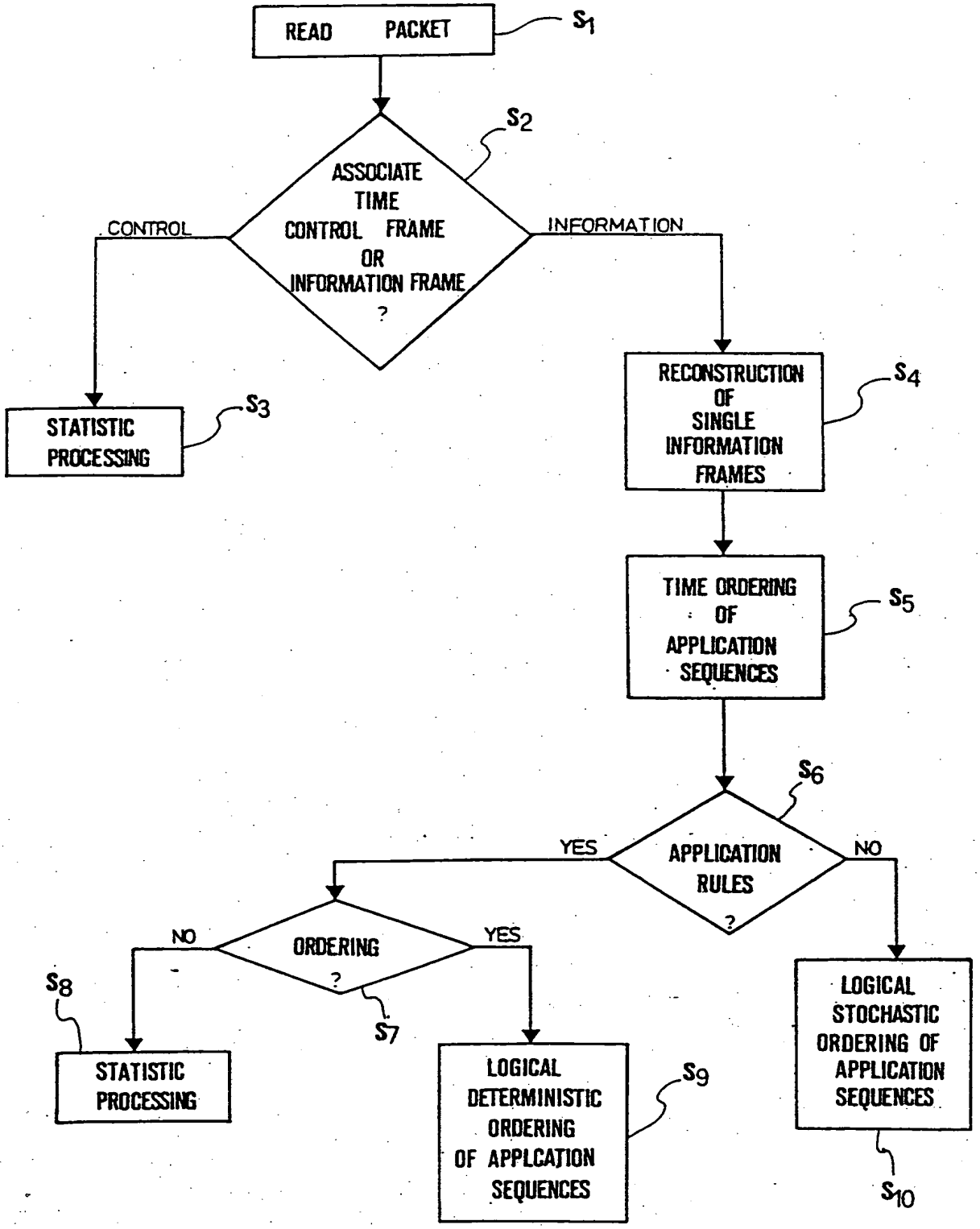
READ PACKET
S1
ASSOCIATE TIME CONTROL FRAME OR INFORMATION FRAME ?
S2
CONTROL
INFORMATION
STATISTIC PROCESSING
S3
RECONSTRUCTION OF SINGLE INFORMATION FRAMES
S4
TIME ORDERING OF APPLICATION SEQUENCES
S5
APPLICATION RULES ?
S6
YES
NO
ORDERING ?
S7
NO
YES
S8
STATISTIC PROCESSING
LOGICAL DETERMINISTIC ORDERING OF APPLCATION SEQUENCES
S9
LOGICAL STOCHASTIC ORDERING OF APPLICATION SEQUENCES
S10

FIG 5

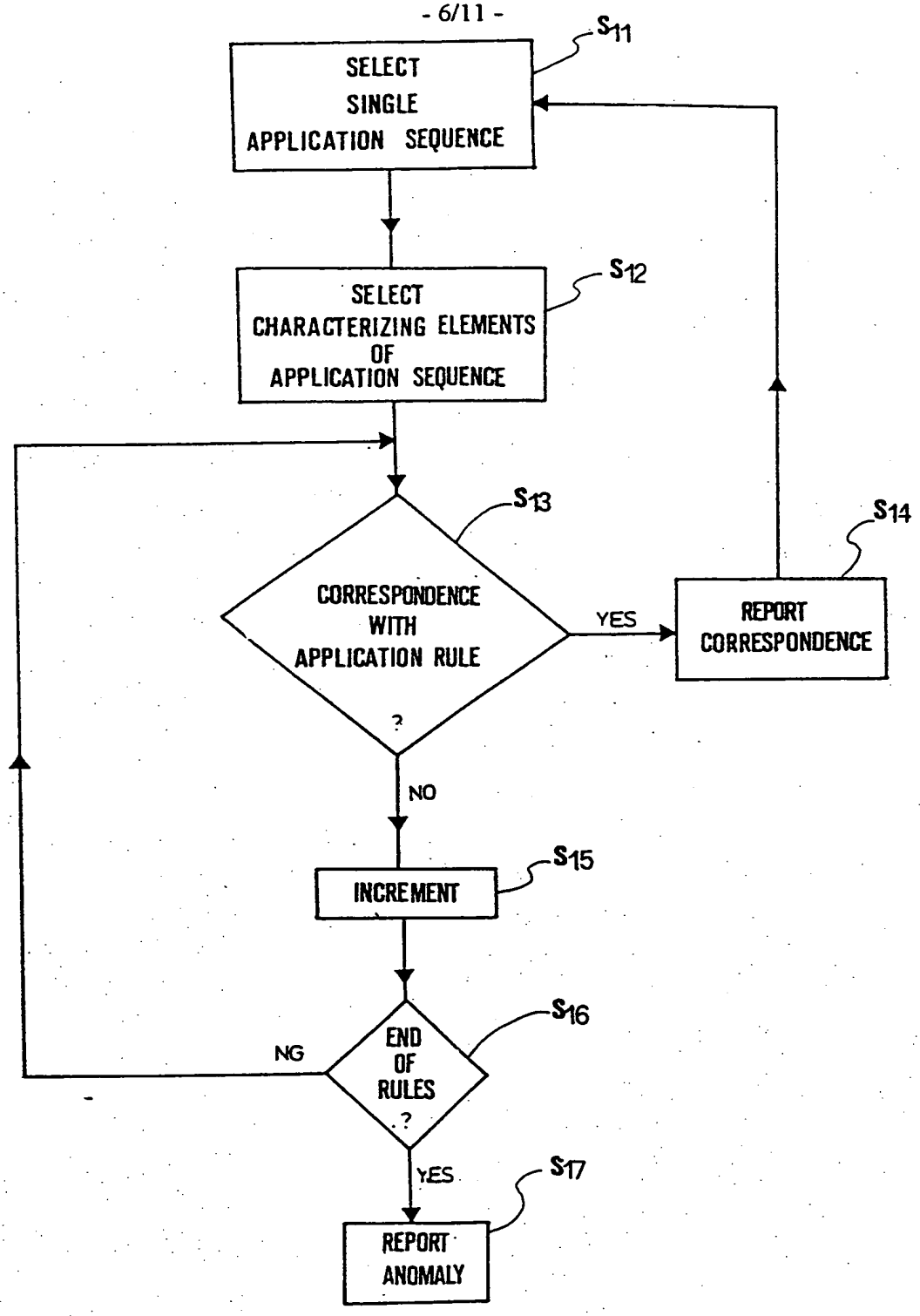
S11
SELECT SINGLE APPLICATION SEQUENCE
S12
SELECT CHARACTERIZING ELEMENTS OF APPLICATION SEQUENCE
S13
CORRESPONDENCE WITH APPLICATION RULE ?
YES
S14
REPORT CORRESPONDENCE
NO
S15
INCREMENT
S16
END OF RULES ?
NG
YES
S17
REPORT ANOMALY

FIG 6

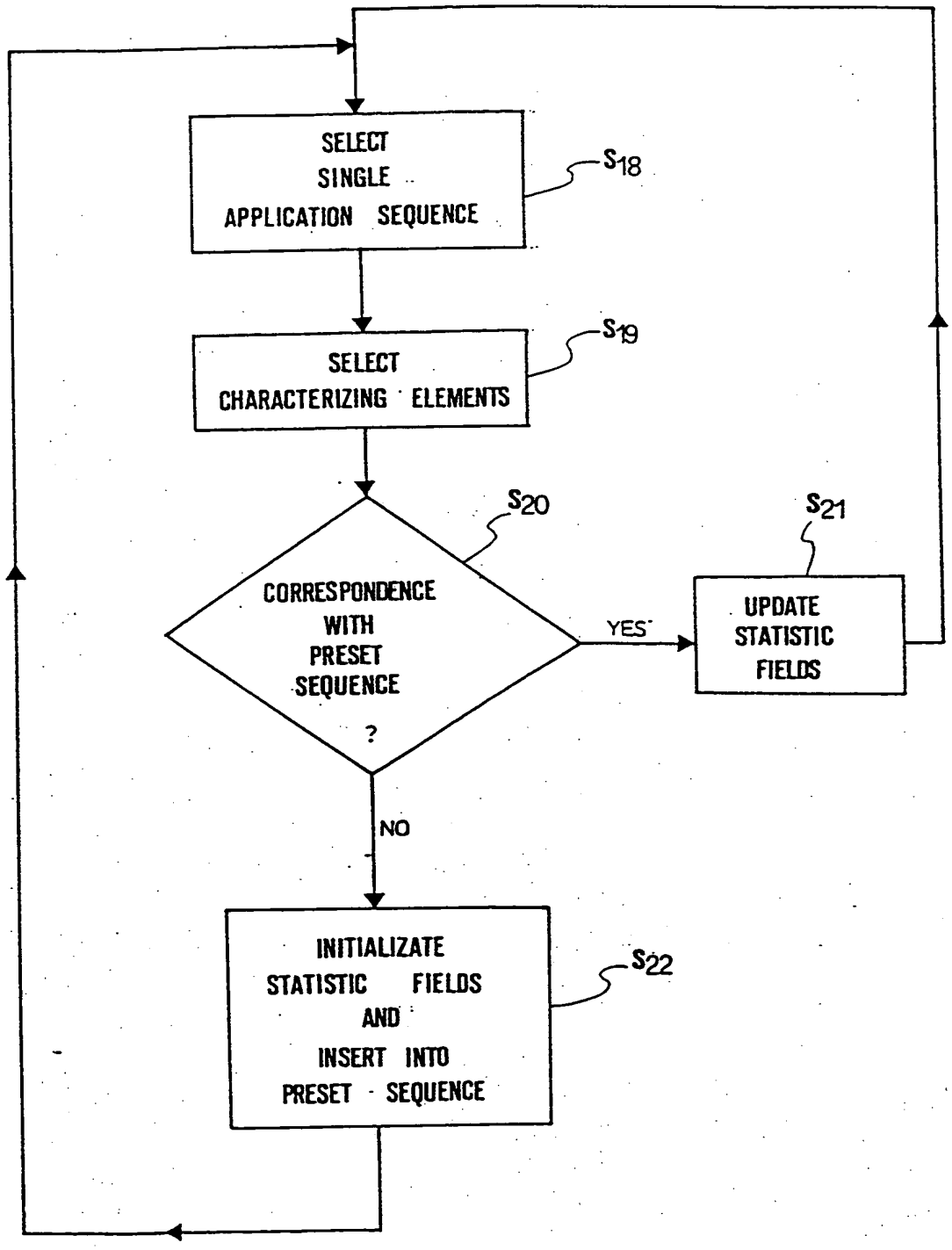
SELECT SINGLE APPLICATION SEQUENCE
S18
SELECT CHARACTERIZING ELEMENTS
S19
CORRESPONDENCE WITH PRESET SEQUENCE ?
S20
YES
UPDATE STATISTIC FIELDS
S21
NO
INITIALIZATE STATISTIC FIELDS AND INSERT INTO PRESET SEQUENCE
S22

FIG 7

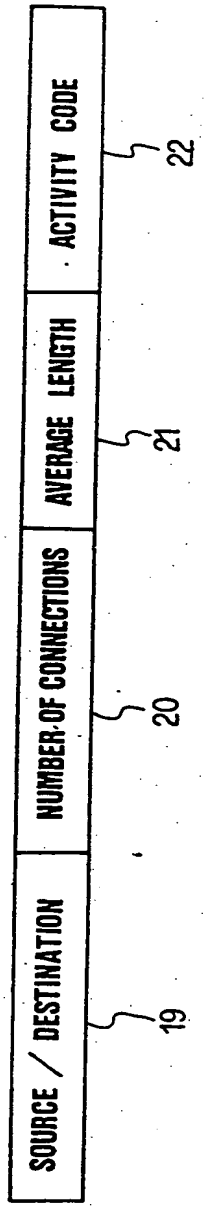
SOURCE / DESTINATION
NUMBER OF CONNECTIONS
AVERAGE LENGTH
ACTIVITY CODE
19
20
21
22

FIG 8A

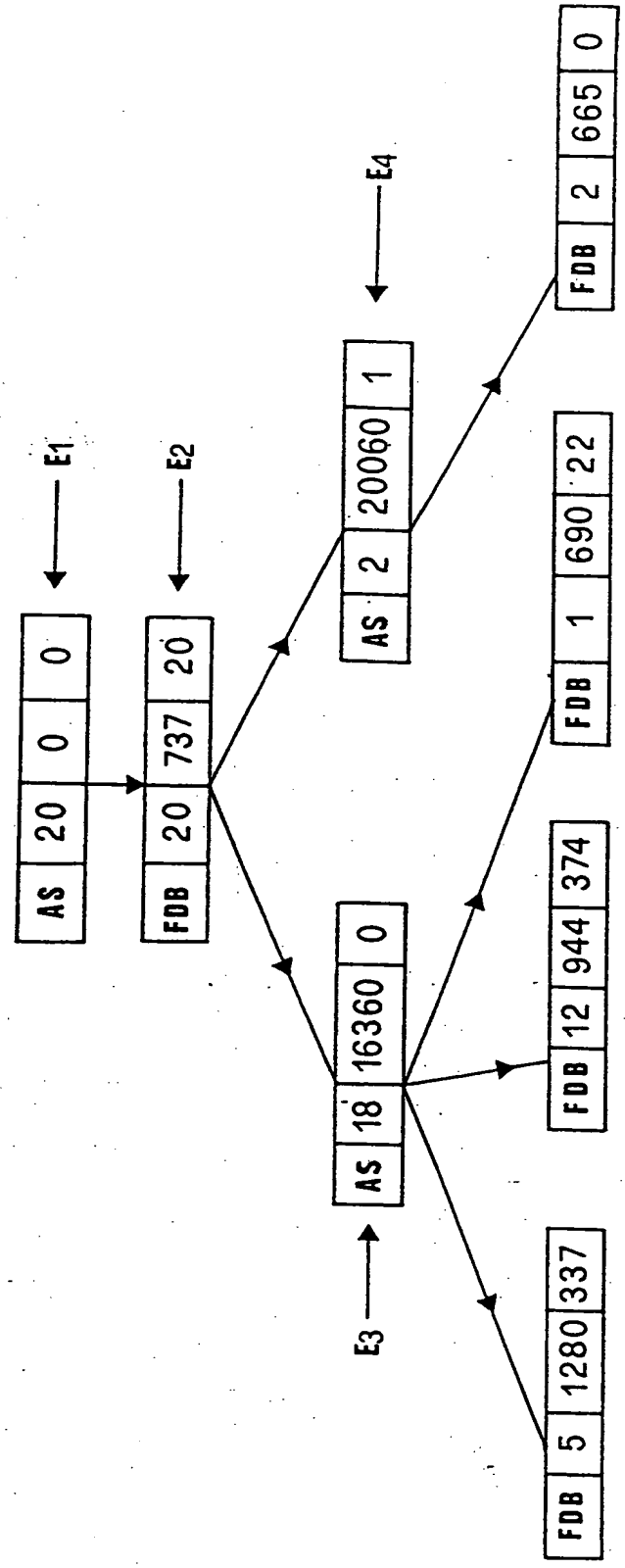
E1
E2
E3
E4
AS 20 0 0
FDB 20 737 20
AS 18 16360 0
AS 2 20060 1
FDB 5 1280 337
FDB 12 944 374
FDB 1 690 22
FDB 2 665 0

FIG 8B

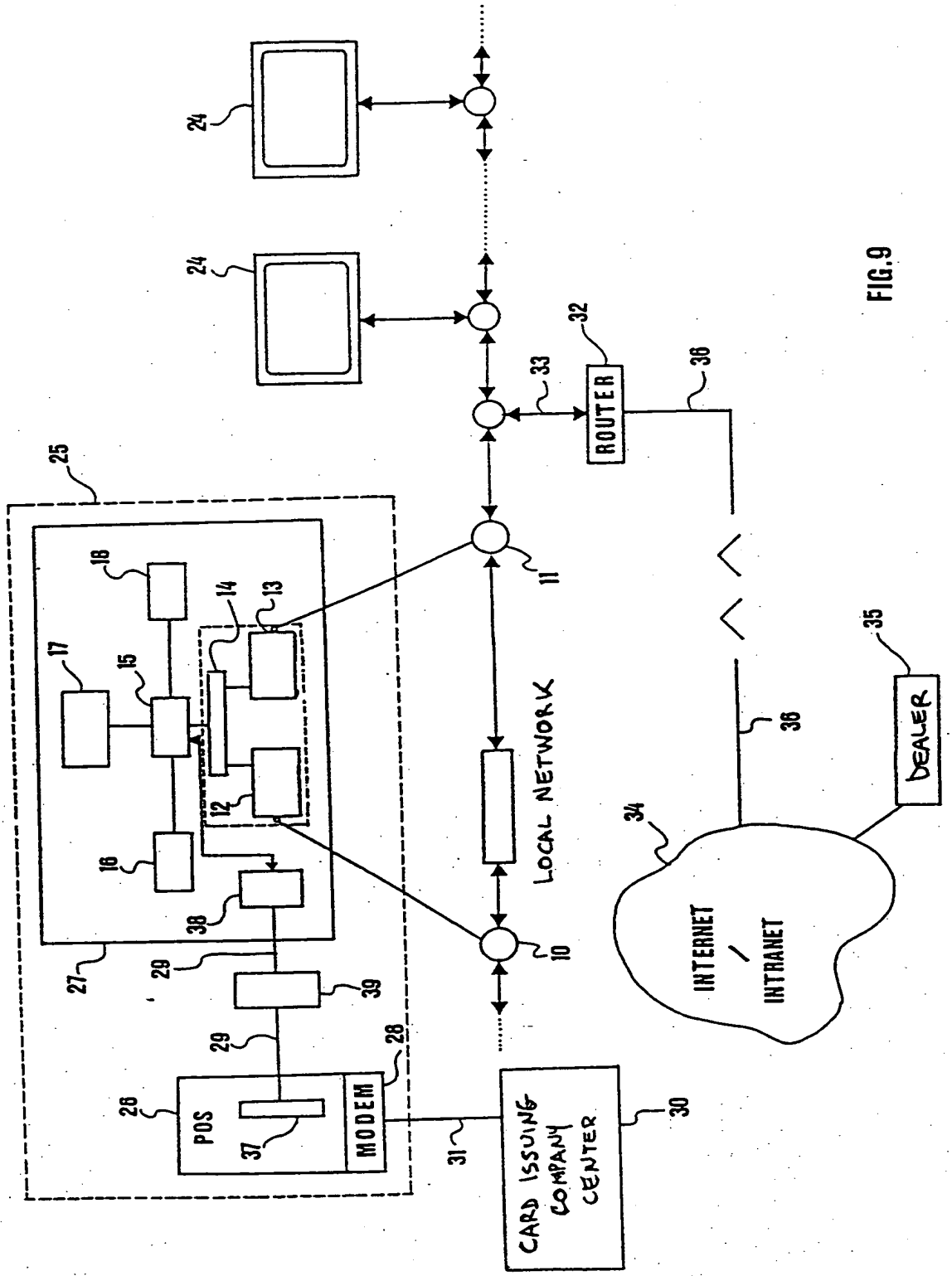
24
24
32
33
ROUTER
36
25
18
14
13
17
15
12
16
38
11
LOCAL NETWORK
10
27
29
39
29
28
26
POS
37
MODEM
31
CARD ISSUING COMPANY CENTER
30
34
INTERNET / INTRANET
36
35
DEALER

FIG.9

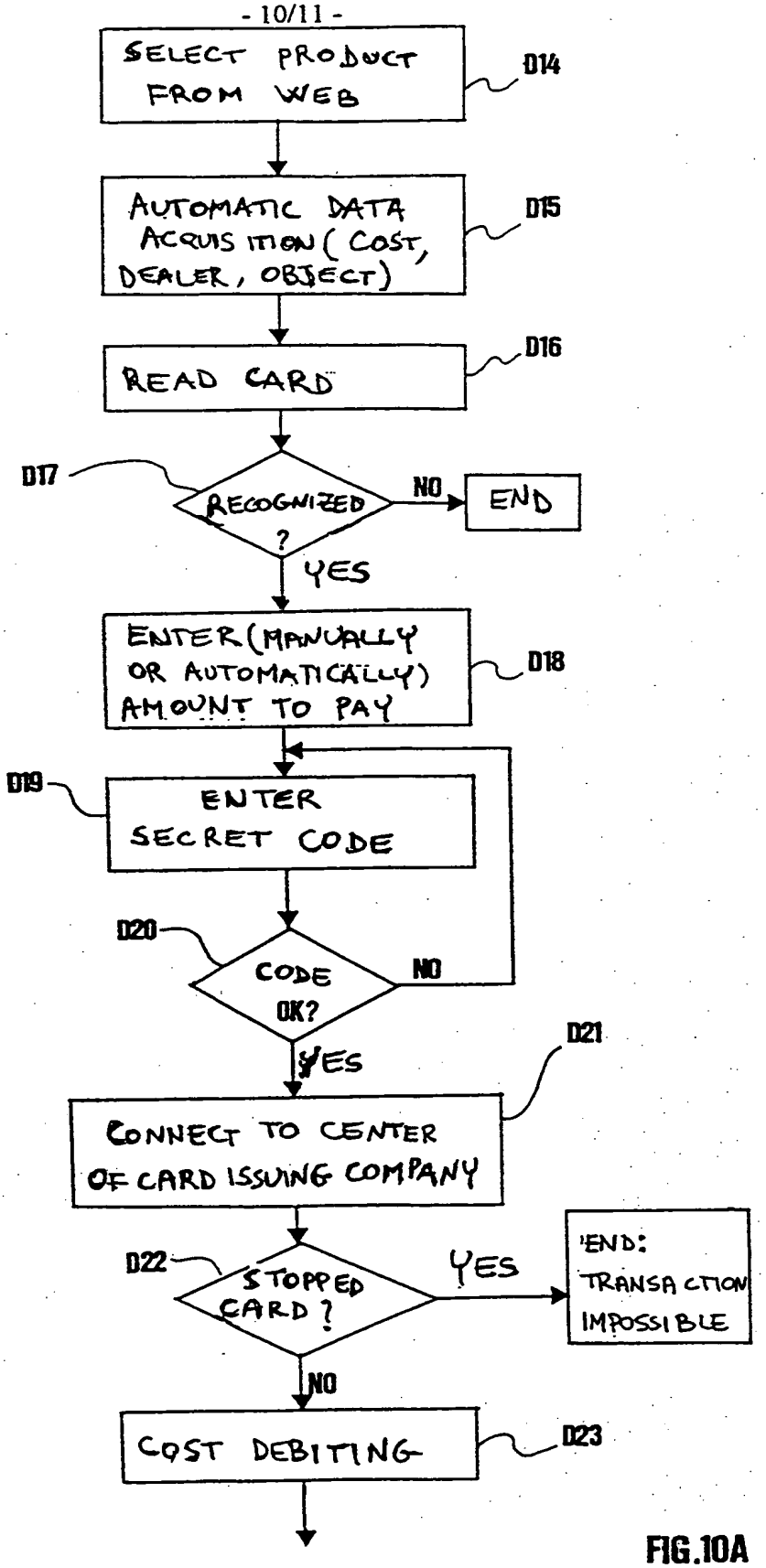

FIG.10A

SUBSTITUTE SHEET (RULE 26)

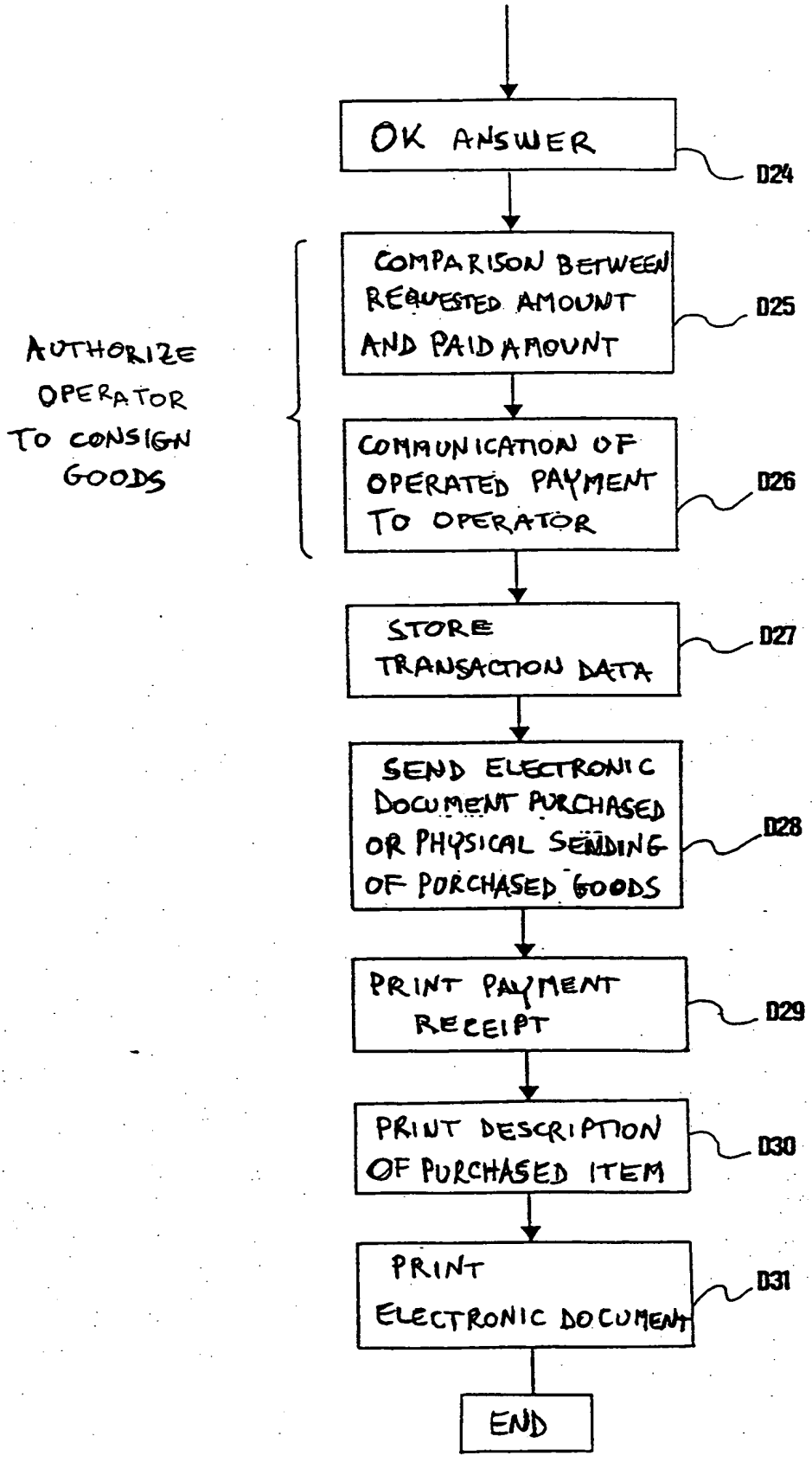

FIG. 10B

ENTERED: 07/05/2001